REMARKS

Favorable reconsideration of this application, as presently amended, is respectfully requested in light of the following discussion.

Claims 1-15 and 21 have been cancelled without prejudice. Applicant reserves the right to pursue these canceled claims in subsequent continuation or divisional applications. New claims 22-37 have been introduced. Accordingly, claims 16-20 and 22-37 remain active in the present application.

In response to the objection to the drawings, it is submitted that reference numeral 61 has been added to the original specification at paragraph [0036] and reference numeral 87 has been added to paragraph [0044] of the original specification in the amendment mailed September 13, 2006. These amendments have been resubmitted herewith.

In response to the objection to claims 17 and 18, applicant has deleted the term "sliding" from each claim so as to obviate these objections.

In response to the rejection of claims 16-20 under 35 U.S.C. 102(b) as being anticipated by Mastandrea, Jr. et al (the '943 patent), claim 16 has been amended to define over this reference by introducing a first abutment surface (such as surface 23 in Figs. 2 and 3) on a coil positioning assembly (10), a second abutment surface (such as the outer surface of flange 22) on positioning assembly (10) and a third abutment surface (such as surface 76) on a specimen positioning assembly (72). Claim 16 has been further amended to specify that the insertion of the specimen positioning assembly (72) into the coil positioning assembly (10) results in the abutment of the respective abutment surfaces (76, flange 22) on the specimen positioning assembly (72) and the coil positioning assembly

(10). This abutment is further characterized in claim 16 as positioning the specimen accurately and repeatably in the sweet spot of the imaging field of the MRI machine.

There is no corresponding structure, coaction or result in the '943 patent.

As noted in applicant's specification at paragraph [0006] (in the published application), a problem has existed in prior MRI imaging machines wherein a specimen required adjustment to accurately axially and circumferentially position and hold the specimen within the main magnet bore in order to achieve optimum imaging. This problem is particularly difficult when imaging a small area, such as a rodent brain in a laboratory specimen.

As described in applicant's specification at paragraph [0013], this problem is solved (by the system of claim 16), which provides accurate, highly repeatable positioning, spacing and concentric alignment within the bore of an MRI machine so as to produce optimum imaging results.

In order to further provide accurate repeatable positioning of a specimen in the bore of an MRI machine, claim 16 recites a specimen retention device, such as described in paragraph [0012] of the published application. One example of such a retention device is ear bars 84 shown in applicant's Fig. 11.

A review of Figs. 1, 2 and 10, taken in conjunction with paragraph [0051] clarifies the ease of accurately positioning the specimen positioning assembly 72 within the positioning assembly 10 to locate the specimen within the sweet spot of the imaging field in a manner similar to inserting a cartridge into a gun. A simple abutment by axial insertion of the specimen positioning assembly 72 into the positioning assembly 10 is all

that is required. This type of simple, repeatable alignment and coaction by mechanical abutment is not found in Mastandrea.

A review of Mastandrea fails to disclose exactly how the patient is positioned in an MRI machine. Some type of powered "drive" apparently moves the patient in and out of the MRI bore while pushing and pulling a heavy coil weighing " . . . up to 100kg or more." There is nothing like that set forth in applicant's claim 16. The movement and alignment of the patient in Mastandrea is not limited or set by any abutment.

For the same reasons set forth above, it is submitted that claims 16-20, as amended, patentably define over Hussmann (5,590,655). Hussmann has no abutment surfaces in which determine the axial position of a specimen within the bore of an MRI machine. As noted in Hussmann at column 26, lines 24-34, a patient lies on a table 902 which slides over a platform 904 and is moved progressively through the imager for searching. The position of the table 902 is referenced electronically. This operation is nothing like that set forth in applicant's claims 16-20.

New claims 22-37 have been drafted to include the easy, accurate repeatable positioning of a specimen holder in a positioning assembly via abutment. No abutment is disclosed in either applied reference for axially positioning a specimen in an imaging machine. As noted in applicant's published application at paragraph [0013], the invention can be used with imaging machines other than MRI machines and in this case, magnets may not be positioned by the invention. Reference numerals are provided below in new claim 22 to facilitate the examiner's review.

22. (new) A specimen positioning system (10,72) insertable within an axial bore (12) of an imaging machine having an imaging field with a sweet spot (92), said system (10, 72) easily, accurately and repeatably positioning a non-human laboratory specimen in the sweet spot, said system comprising:

a positioning assembly (10) comprising;

at least a first pair of support members (60) insertable within the axial bore of the imaging machine;

a first mounting member (16) coupled to said first pair of support members (60) and having a first abutment surface (23) engageable with the imaging machine such that said positioning assembly (10) is axially, radially and circumferentially positioned with respect to the axial bore (12) of the imaging machine;

a radially-extending second abutment surface (22) provided on said positioning assembly (10); and

said positioning assembly (10) having an aperture (27) receiving axial passage of the specimen into the axial bore (12) of the imaging machine;

a specimen positioning assembly (72) comprising;

at least a second pair of support members (86) axially movable along said first pair of support members (60) on said positioning assembly (10);

a retention device (77) provided on said specimen positioning assembly (72) and configured to pass through the aperture (27) of said positioning assembly (10) and secure the specimen in a fixed axial position;

a radially-extending third abutment surface (82) provided on said specimen positioning assembly (72) and engageable with said second abutment surface (22) on said integrated positioning assembly (10); and

an axially-extending interconnection (60, 86) provided between said first (60) and second (86) pairs of support members, said interconnection (60, 68) locating and supporting said specimen positioning assembly (72) within the bore (12) of the imaging machine and within the positioning assembly (10); and

wherein axial insertion of said specimen positioning assembly (72) through the aperture (27) of said positioning assembly (10) and along said axially-extending interconnection (60, 68) engages said radially-extending second (22) and third (76) abutment surfaces and thereby accurately and repeatably positions the specimen in the sweet spot (92) of the imaging field so as to enable optimum repeatable imaging of the specimen.

Respectfully submitted,

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